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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/044,962      | 01/15/2002  | Takeshi Funahashi    | Q66581              | 3096             |

7590 07/24/2006

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EXAMINER

SETH, MANAV

ART UNIT PAPER NUMBER

2624

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/044,962

Applicant(s)

FUNAHASHI, TAKESHI

Examiner

Manav Seth

Art Unit

2624

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 20 March 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☒ The Notice of Appeal was filed on 20 March 2006. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1,2,5,7-11 and 13-15.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
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Continuation of 11. does NOT place the application in condition for allowance because: applicant's arguments with respect to amended claims have been fully considered but are not persuasive.

Adachi as disclosed teaches "Independently of the signal compression and extension processes carried out on the image signal, which represents an image obtained by the normal image recording, the signal compression and extension process can be employed which are suitable for image signals obtained from the inter-image operation processing....." (col. 8, lines 67-68 through col. 9, lines 1-20) which clearly discloses that different compression processes for both radiation images and subtraction images can be used.

In figure 5, Adachi discloses the masked image 30 and the subtraction images 34, 35 and 36 being supplied to compressor 37. Now concentrating on the disclosure in col. 7, lines 21-36 and figure 5, where Adachi discloses "the image signal representing the masked image 41 and each of the subtraction images 42, 43 and 44 are subject to addition processing, i.e. the reversed inter-image operation processing, which corresponds to the reversed operation...carried out during the compression". Clearly from this disclosure, the reverse compression is performed using addition process. Also, on page 7 of the arguments filed on 03/20/2006, applicant agrees that "the process in Adachi appears to be reversible compression".

Adachi as cited by examiner in col. 1, lines 35-50 discloses that irreversible compression of image signals is commonly known in the art and further teaches in the same disclosure that original image when compressed using a irreversible compression process would generate an image that is not identical to the original image. However, Adachi further discloses in col. 7, lines 28-32 that "In cases where the live images 45, 46 and 47 need not be reproduced, the image signals representing the masked image 41 and each of the subtraction images 42, 43, and 44 need not be added together" thus depicting that a reversible compression is emitted here and irreversible compression exists as generated image is different than the original image, therefore the above disclosure as cited in col. 1, lines 35-50 and col. 7, lines 28-32 reads on the subject matter "performing irreversible compression processing on the energy subtraction signal".

Adachi as disclosed above discloses reversible compression on subtraction images and Applicant has acknowledged and agreed that Adachi teaches reversible compression and thus accepting the advantages of using the well-known reversible compression and thus making it obvious for one of ordinary skill in the art at the time of invention was made to use Adachi's reversible compression in radiation image compression. However, Examiner in the previous office action stated that Adachi does not expressly disclose "performing reversible compression processing on the plurality of the radiation image signals" and therefore cited Ohara to provide the explicit teachings. Ohara which is directed to the same field of endeavor as Adachi, teaches "Inputted data, which if desired, are subjected to data compression, are stored in image storing means. Herein, data compression is carried out employing reversible compression, or irreversible compression.... Said reversible compression is preferred since the degradation of diagnostic information, along with data compression, is minimized" (para. 0223). Thus Ohara providing motivation for using reversible compression in the invention of Adachi on the radiation (input) images.

However, for the argument sake, Applicant itself has agreed and acknowledged in the background of the specification on page 4, that it is well known to perform reversible compression processing on the plurality of the radiation image signals by disclosing "The low energy image is the image utilized also in making an ordinary diagnosis, or the like. Therefore, the low energy signal representing the low energy image has heretofore been compressed with a reversible compressing process, which has the characteristics such that the image quality of the image represented by the decompressed image signal obtained from the decompression processing performed on the compressed image signal, does not become bad" (specification, page 4, lines 17-25) and the same can be used for high energy image signal (specification, page 5, lines 3-6) .

All other arguments have been considered but are not persuasive.



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